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10/583,736	11/14/2006	Joachim Lohr	L7725.06113	8628

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EXAMINER	
WIN, AUNG T	

ART UNIT	PAPER NUMBER
2617	

MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/583,736	LOHR ET AL.	
	Examiner	Art Unit	
	AUNG T. WIN	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 September 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-65* is/are pending in the application.

4a) Of the above claim(s) *1-41* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *42-65* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *24 September 2008* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Drawings

The drawings were received on 09/24/2008. These drawings are acceptable.

Response to Arguments

Applicant's arguments with respect to amended claims 42-65 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 42, 53, 63, 43, 54, 45, 56, 47, 58, 64, 65, 49 & 60 are rejected under 35 U.S.C. 102(e) as being anticipated by Cheng et al. (US20040228313A1).

1.1 Regarding Claim 42, Cheung discloses a data transmission method for use in a mobile communication system, the method comprising:

establishing a radio bearer between a mobile terminal and a radio access network

of the mobile communication system [establishing a radio bearer for uplink and downlink data transmission between mobile terminal and a radio access network according to UMTS standard: Figure 1],

receiving, at the mobile terminal, radio bearer mapping, from the radio access network, information from the radio access network, wherein the radio bearer mapping information: (1) includes a priority assigned to a logical channel that is mapped on a transport channel and (2) indicates a scheduling mode out of plural scheduling modes of the logical channel [receiving transmission parameters information included in the received signaling message wherein the transmission parameters information: (1) includes a priority assigned to a logical channel that is mapped on a transport channel and (2) indicates a transmission mode out of autonomous transmission mode and scheduled transmission mode according to UMTS standard: 0012, 0028 & 0029],

mapping the radio bearer to the logical channel at the mobile terminal based on the received information, and transmitting by the mobile terminal the data via the transport channel [mapping the radio bearer to the logical channel via transport channel based on received transmission parameters information: 0029, 0035, 0037-0041, 0053].

1.2 Regarding Claim 53, Cheng discloses a mobile terminal for use in a mobile communication system, the mobile terminal comprising:

a processing unit that establishes a radio bearer between the mobile terminal and a radio access network [mobile terminal processor that establishes a radio bearer for uplink and downlink data transmission between mobile terminal and a radio access network according to UMTS standard: Figure 1],

a receiving unit that receives, from the radio access network of the mobile communication system, radio bearer mapping information including a priority assigned to a logical channel that is mapped on a transport channel and indicating a scheduling mode out of plural scheduling modes of the logical channel [mobile receiver that receives transmission parameters information included in the received signaling message wherein the transmission parameters information: (1) includes a priority assigned to a logical channel that is mapped on a transport channel and (2) indicates a transmission mode out of autonomous transmission mode and scheduled transmission mode according to UMTS standard: 0012, 0028 & 0029],

a mapping unit that maps the radio bearer to the logical channel based on the received information, and a transmitting unit that transmits transmit the data via the transport channel [(MAC unit that maps the radio bearer to the logical channel via transport channel based on received transmission parameters information and mobile

transmitter that transmit the data via the transport channel): 0029, 0035, 0037-0041, 0053].

1.3 Claim 63 is rejected for the same reason as stated above in Claim 42 & 53 rejections because claim 63 discloses method substantially close to corresponding method executed by processor of mobile terminal of claim 63. Mobile terminal as disclosed by Cheng must comprise computer readable medium for storing instructions as claimed because mobile terminal is configured to process according to stored software instructions.

1.4 Claims 43 & 54 is rejected for the same reason as stated above in Claims 41 rejection. Cheng discloses the data transmission method and mobile terminal according to claim 42 & 53, further comprising selecting unit the selects a transport format combination to be used for transmitting data based on at least the priority assigned to the logical channel [0038 & Figure 3].

1.5 Claims 45 & 56 are rejected for the same reason as stated above in Claims 43 & 54 rejections. Cheng discloses the data transmission method and mobile terminal, wherein transmitter transmits the data using the selected transport format combination [0038 & Figure 3].

1.6 Claims 47 & 58 is rejected for the same reason as stated above in Claims 42 & 53 rejections. Cheng discloses the data transmission method and mobile terminal, further comprising receiving unit receives signaling message from the radio access network indicating the scheduling mode of the radio bearer [received signaling message includes transmission parameter indicating transmission mode out of autonomous transmission mode and scheduled transmission mode according to UMTS standard: 0012, 0028 & 0029].

1.7 Claims 64 & 65 are rejected for the same reason as stated above in Claims 44 & 55 rejections because Cheng discloses that data is transmitted based on TFC selection [0038].

1.8 Claims 49 & 60 are rejected for the same reason as stated above in Claims 42 & 53 rejections. Regarding Claims 49 & 60, Cheng discloses that the data is transmitted on enhanced dedicated uplink channel [0021, 0031 & 0047].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 44, 55, 46, 57, 48, 59 & 52, are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng et al. (US20040228313A1) in view of Choi et al. (US20020136181A1).

2.1 Regarding Claims 44 & 55, Cheng discloses the data transmission method and mobile terminal according to claims 43 & 54 and also teaches selecting transport format combination according to the indicated scheduling mode of logical channel as rejections stated above but does not explicitly disclose setting a flag.

Choi discloses setting priority for interrupted TBs to “0” (i.e., setting a flag to determine whether there is interrupted TBs or not) and assigning priority to each logical channels and the transport format combination is selected based on the flag and the priority assigned to the logical channel [0016].

Therefore, it would have been obvious to one of ordinary skilled in the art at the time of invention of made to modify the claimed mapping and data transmission method by implementing the flag setting as taught by Choi so that transport format combination is selected based on the flag and the priority assigned to the logical channel as claimed. One of ordinary skilled in the art at the time of invention of made to do this for efficient and enhanced data transmission based on priority.

2.2 Claims 46 & 57 are rejected for the same reason as stated above in Claims 44 & 53 rejections. It would have been obvious to one of ordinary skilled in the art that the method and mobile terminal as modified above would teach the data transmission method as cited in Claims 46 & 57, further comprising multiplexing the data to the transport channel based on a flag set according to the indicated scheduling mode of the logical channel and the priority assigned to the logical channel because modified method and mobile terminal teaches mapping logical channels into transport channels based on flag setting and priorities of logical channels as stated above Claims 46 & 57 rejection [Cheng teaches mapping one or more logical channels to at least one transport channel: 0029].

2.3 Claims 48 & 59 is rejected for the same reason as stated above in Claims 44 & 53 rejections. It would have been obvious to one of ordinary skilled in the art that the method and mobile terminal as in view of Choi modified above would teach the data transmission method based on priority as claimed because Choi teaches setting flag to indicate the priority of data on the logical channel to be transmitted [see claim 44 & 53 rejections as stated above]

2.4 Claim 52 is rejected for the same reason as stated above in Claim 44 rejections because the method as modified would teach setting at the mobile terminal a flag

according to the indicated scheduling mode of the logical channel [see claim 44 rejection].

3. Claim 50 & 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng et al. (US20040228313A1) in view of Beckmann et al. (US20030007517A1).

3.1 Regarding Claims 50 & 61, Cheng discloses the data transmission method according to claim 42 & 53 but does not explicitly disclose that the radio bearer is mapped on at least two logical channels each being assigned a priority although it would have been obvious to one skilled in the art that such feature is well known and well defined according to UMTS standard at the time of invention of made. Beckmann also discloses such feature [see Figure 2]. Therefore, it would have been obvious to one of ordinary skilled in the art at the time of invention of made to modify the Cheng data transmission method as taught by Beckmann so that the radio bearer is mapped on at least two logical channels each being assigned a priority as claimed. One of ordinary skill in the art at the time of invention of made to do this to optimize the mobile network.

4. Claims 51 & 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheng et al. (US20040228313A1) in view of applicant's admitted prior art 3GPP TR 25.896 V6.0.0 (2004-03).

4.1 Regarding Claim 51 & 62, Cheng discloses the data transmission method according to claim 42, wherein the different scheduling mode i.e., autonomous and scheduling modes for different data traffic type as stated above [0012] although Cheng does not explicitly disclose that disclosed transmission modes are referring to a time and rate controlled scheduling mode or a rate controlled scheduling mode.

Admitted prior at teaches that co-existence of different scheduling modes is provided the flexibility in serving the different traffic types [section 7.1.2.4]. Therefore, it would have been obvious to one of ordinary skilled in the art at the time of invention of made to modify Cheng data transmission method to implement claimed scheduling mode as taught by 3GPP publication. One of ordinary skilled in the art at the time of invention of made to do this to provide flexibility in serving the different traffic data types according to 3GPP standard.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AUNG T. WIN whose telephone number is (571)272-7549. The examiner can normally be reached on 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander Eisen can be reached on (571) 272-7687. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Aung T Win/
Examiner, Art Unit 2617

/Alexander Eisen/
Supervisory Patent Examiner, Art Unit 2617